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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,839	06/20/2001	Andrew Witkowski	50277-1546	6253

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EXAMINER

WOO, ISAAC M

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 01/09/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/886,839

Applicant(s)

WITKOWSKI ET AL.

Examiner

Isaac M Woo

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 41-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 41-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to Applicant's Request for Reconsiderations, filed on November 12, 2003 have been considered but they are not persuasive.
2. The 35 USC § 112 rejections to claim 7, has been withdrawn because of applicant's persuasive argument. And the whole page (page number 2) of Patent Abstractions and clear English version of Sasaki, as applicant's request, included.
3. Claims 1-20 and 41-60 are pending.

Response to arguments

4. In response to Applicant's Remarks filed on November 12, 2003, the following factual arguments are noted:

Sasaki and/or Miller combined do not disclose or suggest,

"in response database query, retrieving data from a relational structure as if the data was stored in a multi-dimensional array and storing the data in a non-relational structure that can be addressed as a multi-dimensional array, by performing the operation specified in the database query ".

Examiner disagrees, Sasaki discloses, client-server database system, especially, searches and extracts data from the relational database on a server, and relates to the

record medium which recorded data base retrieval / extract system, see (section [0001]) discloses, database system which accesses the table data of the relational database (RDB) on a server, see (section [0002]), SQL, see (section [0009]). This teaches that retrieving data in response to (by) database query function (SQL) and database has database table (section [0006]) that is a multi-dimensional array and retrieved data is saved and this data format is spreadsheet type data (spreadsheet is multi-dimensional data type), which can be addressed as a multi-dimensional array, see (section [0002], lines 1-12, section [0019], lines 1-10, section [0022], lines 1-18). Thus, Sasaki teaches, in response database query, retrieving data from a relational structure as if the data was stored in a multi-dimensional array. Miller discloses, storing the data in a non-relational structure, see (col. 3, lines 54-66). And all previously specified operations are in response to the database query. Thus, Sasaki and Miller combined teach, storing the data in a non-relational structure that can be addressed as a multi-dimensional array, by performing the operation specified in the database query.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-20 and 41-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki Kanzunobu (Japanese Publication No. 11-161656, hereinafter, "Sasaki") in view of Miller et al (U.S. Patent No. 6,615,241, hereinafter, "Miller").

With respect to claims 1, 7, 9, 10, 12 and 13, Sasaki discloses, the method for performing a database query operation, receiving, at a database server (section [0021], lines 1-5), a database query (SQL) that specifies an operation for manipulating data, see (section [0036], lines 1-4); reference data in a relational structure (section [0009], lines 1-5, section [0003], lines 1-12, the data was stored in a multi-dimensional array (section [0009], lines 1-14, database table has the format of row and column, which is multi-dimensional array); in response to receiving the database query, the database server executing the query by performing, see (by the SQL, section [0019], lines 1-18); retrieving a first set of data from a first relational structure, see (section [0019], lines 1-18, section [0022], lines 1-18); storing the first set of data in a structure that can be addressed as a multi-dimensional array (spreadsheet), see (data is stored in record medium, section [0002], lines 1-12, section [0019], lines 1-10, section [0022], lines 1-18), and performing the first set of data by performing the operation specified in the database query on the data, see (section [0022], lines 1-18, section [0025], lines 1-12, extraction condition input function with database query performing based on condition input). Sasaki discloses the storing the first data set in a data structure of spreadsheet, see (section [0019], lines 1-18). Sasaki does not explicitly disclose the storing the first

data set in a data "non-relational structure". However, Miller discloses the spreadsheet is one of a non-relational data structure, see (col. 3, lines 54-66). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to include the non-relational structure as taught in Miller in the system of Sasaki to store data in non-relational data structure. Because management of relational database requires understanding of syntax of SQL sentence, which is not easy for users. Spreadsheet provides easy manipulation of data management for users.

With respect to claims 2 and 17-18, Sasaki discloses, the storing the first set of data in a structure that can be symbolically addressed as an n-dimensional array (spreadsheet), see (page 2, section [0009]).

With respect to claim 3, Sasaki discloses, presenting (displaying) in tabular format results from performing the operation, see (page 2, section [0009], lines 1-6).

With respect to claim 4, Sasaki discloses, automatically reordering the specified operations to allow the operation to be correctly performed on the data stored in the non-relational structure, see (page 10, section [0058], lines 1-7, page 4, section [0019], lines 1-18).

With respect to claim 5, Sasaki discloses, aggregating over a set of data information contained in multiple cells of the non-relational structure (spreadsheet includes multiple cells), see (page 2, section [0009], lines 1-6).

With respect to claims 6, 11 and 20, Sasaki discloses, repeatedly performing a series of manipulations on the data until a particular criterion is satisfied, see (page 7, section [0037], lines 1-18).

With respect to claim 8, Sasaki discloses, receiving a database query that specifies a multi-dimensional array operation, see (page 7, section [0037], lines 1-18).

With respect to claim 14, Sasaki discloses, retrieving the first set of data from one or more tables within the relational database, see (page 4, section [0019], lines 1-18, page 5, section [0022], lines 1-18).

With respect to claims 15-16, Sasaki discloses, storing the first set of data within a non-relational spreadsheet application, see (page 2, section [0009], lines 1-10, page 4, section [0019], lines 1-18, page 5, section [0022], lines 1-18).

With respect to claim 19, Sasaki discloses, after performing the step of manipulating the first set of data, storing in a second relational structure, result

information based on performance of the operation, see (page 2, section [0009], lines 1-10, page 4, section [0019], lines 1-18, page 5, section [0022], lines 1-18).

Claims 41-60 are computer-readable medium claims which are identical previous claims 1-20, are rejected on grounds corresponding to the reasons given above in claims 1-20.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (703) 305-0081. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

IMW
January 6, 2004


SHAHID ALAM
PRIMARY EXAMINER